## **POSTURE** UNIȚED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Alley

Allen T. Hopper et al.

Serial No.: 10/067,996

Group Art Unit: Unassigned

Filed: February 8, 2002

Examiner: Unassigned

For: PHOSPHODIESTERASE 4 INHIBITORS

## INFORMATION DISCLOSURE STATEMENT UNDER 37 CFR §§ 1.56, 1.97 and 1.98

Assistant Commissioner for Patents Washington, D. C. 20231

Sir:

CITEL	<u>O MATERIALS</u>
Applic	cant(s) hereby disclose the information listed in the attached form PTO-1449.
	Copies of materials listed but not attached were cited in parent application Serial No; see 37 C.F.R. § 1.98(d).
	Copies of materials listed but not attached were cited in an International Search Report dated; receipt of the International Search Report and copies of references was confirmed by the PCT International Division of the U.S. PTO in the Notice of Acceptance mailed
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П	All listed materials are in the English language; see 37 C.F.R. § 1.98.

Non-English language references:

The reference(s): in the English-language is (are) indicated by commercial data bases to correspond to the reference(s): , respectively.

(An) English-language translation(s) of the references: is (are) provided.

A commercial English-language abstract of reference(s) is (are) provided.

An English-language search report or an equivalent paper from a foreign patent office translated into English in pertinent part in connection with a counterpart foreign application, is provided indicating the relevance of the cited reference(s).

**FEES** 

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	Each item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this statement.
	No item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application and, to the knowledge of the undersigned, having made reasonable inquiry, no such item was known to any individual designated in 37 CFR § 1.56(c), more than three months prior to the filing of this statement.

## **DEPOSIT ACCOUNT**

If a fee is due, attached is a check in the amount of § ... However, the Commissioner is hereby authorized to charge fees under 37 CFR § 1.16 and § 1.17 which may be required to facilitate this filing, or credit any overpayment to Deposit Account #13-3402, two copies of this paper are attached for this purpose.

Respectfully submitted,

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Attorney Docket No.: MEMORY-2

Date: April 15, 2002

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## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet of 2

DENIA	Complete if Known
Application Number	10/067,996
Filing Date	February 8, 2002
First Named Inventor	Allen T. Hopper
Group Art Unit	Unassgined
Examiner Name	Unassigned
Attorney Docket Number	MEMORY-2

			U.S. PATENT DOCUM	MENTS	
Examiner Initials *	Cite No.1	U.S. Patent Document  Kind Code <sup>2</sup> (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevan Passages or Relevant Figures Appear
	A1	3,917,583	Meyer et al	11-04-1975	
-	A2	3,919,192	Meyer et al.	11-11-1975	
	A3	5,744,473	Chasin et al.	04-28-1998`	
	A4	5,814,651	Duplantier et al.	09-29-1998	
	A5	5,864,037	Chasin et al.	01-26-1999	
	A6	5,935,978	Fenton et al.	08-10-1999	
	A7	5,939,422	Cavalla et al.	08-17-1999	
	A8	6,037,470	Cavalla et al.	03-14-2000	
	A9	6,040,447	Cavalla et al.	03-21-2000	
	A10	6,057,445	Cavalla et al.	05-02-2000	
	A11	6,211,367	Cavalla et al.	04-03-2001	
	A12	6,228,859	Cavalla et al.	05-08-2001	
	A13	6,310,205	Chasin et al.	10-30-2001	
	A14	6,319,928	Chasin et al.	11-20-2001	
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Examiner Initials*	Cite No. <sup>1</sup>	Fore Office <sup>3</sup>	eign Patent Document  Number <sup>4</sup> Kind C (if kno		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sub>6</sub>
-	· A15	DE	2 405 895			08-29-1974	<u> </u>	
	A16	DE	42 30 755		-	03-17-1994		
	A17	DE	197 02 785			07-30-1998		
	A18	DE	199 35 209			02-08-2001		
	A19	JP	62-10085			01-19-1987		
	A20	JP	10-72415			03-17-1998		
	A21	JP	11-180982			07-06-1999		
	A22	JP	11-189577			07-13-1999		
	A23	JP	2000-72773			03-07-2000		
	A24	WIPO	WO 93/25517			12-23-1993		
	A25	WIPO	WO 94/14742			07-07-1994		
	A26	WIPO	WO 98/58901			12-30-1998		
	A27	WIPO	WO99/24432			05-20-1999		_
	A28	WIPO	WO 99/29694			06-17-1999		
	A29	WIPO	WO 01/87281			11-22-2001		

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Substitute 1	or form 1449A/PTC	)			Complete if Known
	314 A TION	DIC	OL COURT	Application Number	10/067,996
			CLOSURE	Filing Date	February 8, 2002
STAT	EMENT B	YΑ	PPLICANT	First Named Inventor	Allen T. Hopper
				Group Art Unit	Unassgined
(	use as many she	ets as	necessary)	Examiner Name	Unassigned
Sheet	2	of	2	Attorney Docket Number	MEMORY-2

		OTHER PRIOR ART NON PATENT LITERATURE DOCUMENTS	
Examiner Initials *	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
	A30`√	THOMAS C. MCKENZIE et al., "The Gomberg-Bachmann Reaction of Purines", <u>J. Heterocyclic Chem.</u> , May-Jun 1987, pp. 859-861, Vol. 24	
	A31	VASU NAIR et al., "Novel, Stable Congeners of Antiretroviral Compound 2', 3'- Dideoxyadenosine," <u>J. Am. Chem. Soc.</u> , 1989, pp. 8502-8504, Vol. 111	
	A32	VASU NAIR et al., "Synthesis Of Congeners Of Adenosine Resistant To Deamination By Adenosine Deaminase, " <u>J. Chem. Soc Comm.</u> , 1989, pp. 878-879	
	A33	JAMES L. KELLEY et al., "Synthesis and Structure- Activity Relationships of 2-Substituted-6- (dimethylamino)- 9- (4-methylbenzyl)-9H-purines with Antirhinovirus Activity," J. Med. Chem., 1989, pp. 218-224, Vol. 32	
	A34	JAMES E. KELLEY et al., "Antirhinovirus structure-activity relationships of 6-substituted-9-(4-methylbenzyl)-2-trifluoromethyl-9H-purines," <u>Eur. J. Med. Chem.</u> , 1990, pp. 131-135, Vol. 25	
	A35 (	ROGER J. SCHILLING et al., "A High-Throughput Assay For Cyclic Nucleotide Phosphodiesterases," Analytical Biochemistry, 1994, pp.154-158, Vol. 215	
	A36 \	DONALD V. DANIELS et al., "A Semiautomated Method for the Assay of Cyclic Adenosine 5'-Monophosphate Phosphodiesterase," <u>Analytical Biochemistry</u> , 1996, pp. 367-369, Vol. 236	
	A37	. JEAN-JACQUES BOURGUIGNON et al., "9-Benzyladenines: Potent and Selective cAMP Phosphodiesterase Inhibitors," J. Med. Chem, 1997, pp. 1768-1770, Vol. 40	
	A38	. JAMES L. KELLEY et al., "6-(Alkylamino)-9-alkylpurines. A New Class of Potential Antipsychotic Agents," <u>J. Med. Chem.</u> , 1997, pp. 3207-3216, Vol. 40	
	A39	HIROYUKI SAWANISHI et al., "Selective Inhibitors of Cyclic AMP-Specific Phosphodiesterase: Heterocycle-Condensed Purines", <u>J. Med. Chem.</u> , 1997, pp. 3248-3253, Vol. 40	
	A40 -′	J.E. SOUNNES et al., "Proposal for Pharmacologically Distinct Conformers of PDE4 Cyclic AMP Phosphodiesterases", <u>Cell Signal</u> , 1997, pp. 227-236. Vol. 9, No. 3-4	
	A41	MARY ELIZABETH BACH et al., "Age-related defects in spatial memory are correlated with defects in the late phase of hippocampal long term potentiation <i>in vitro</i> and are attenuated by drugs that enhance the cAMP signaling pathway", Proc. Natl. Acad. Sci. USA, April 1999, pp.5280-5285, Vol. 96	
	A42	ELISABETH BOICHOT et al., "Anti-Inflammatory Activities of a New Series of Selective Phosphodiesterase 4 Inhibitors Derived from 9- Benzyladenine," The Journal Of Pharmacology And Experimental Therapeutics, 2000, pp. 647-653, Vol 292, No.2	

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Signature Considered	Exammer	Date
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<sup>&</sup>lt;sup>1</sup> Unique citation designation number. <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.